

**ABSTRACT**

A method for generating one or more images includes collecting data samples representative of a motion of an object, acquiring image data of at least a part of the object over a time interval, synchronizing the data samples and the image data to a common time base, and generating one or more images based on the synchronized image data. A method for generating one or more images includes acquiring image data of at least a part of an object over a time interval, associating the image data with one or more phases of a motion cycle, and constructing one or more images using the image data that are associated with the respective one or more phases.